US 20130009469A1

(19) **United States**

(12) **Patent Application Publication**

(10) **Pub. No.: US 2013/0009469 A1**

(43) **Pub. Date: Jan. 10, 2013**

Gillett

(54) **HYBRID ENERGY SYSTEM**

(76) Inventor: **Carla R. Gillett**, Sacramento, CA (US)

(21) Appl. No.: **13/135,416**

(22) Filed: **Jul. 6, 2011**

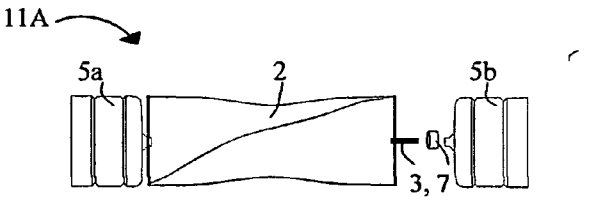
Publication Classification

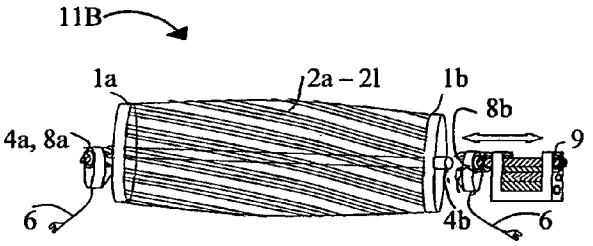
(51) **Int. Cl.**
H02J 3/38 (2006.01)

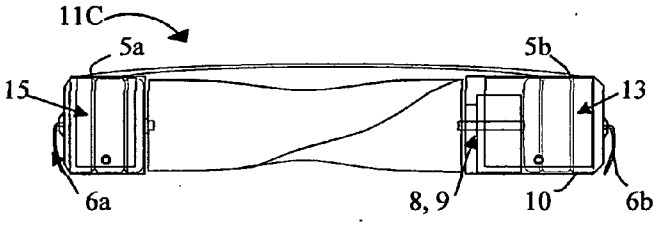
(52) **U.S. Cl.** **307/25**

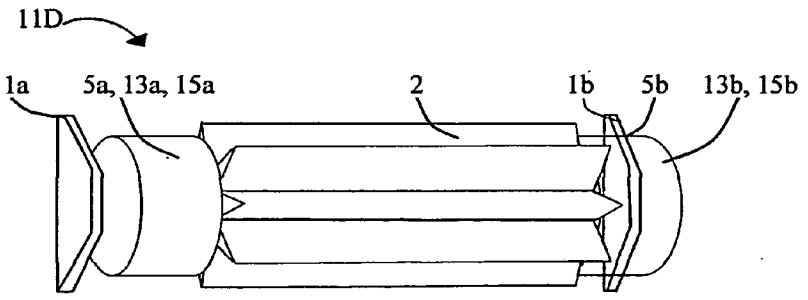
(57) **ABSTRACT**

A hybrid energy system comprised of methods that work in conjunction with multiple kinetic energy turbine types, valves, solar power panels, piezoelectric devices and also element force. Hybrid energy powers electrical devices on site and extra power is also consigned off site. A network control system shunts surplus energy to the utility grid via above ground and underground cable. An on site power system charges a parked vehicle battery. A utility service vehicle is employed to deliver charged battery banks to on and off grid customers. A hybrid energy system integrates on rooftops, skyscrapers, bridges, tunnels, and aqueducts, as well as infrastructure on and off shore. A hybrid energy system integrates in various vehicle types and the power is managed accordingly by the vehicle control system.









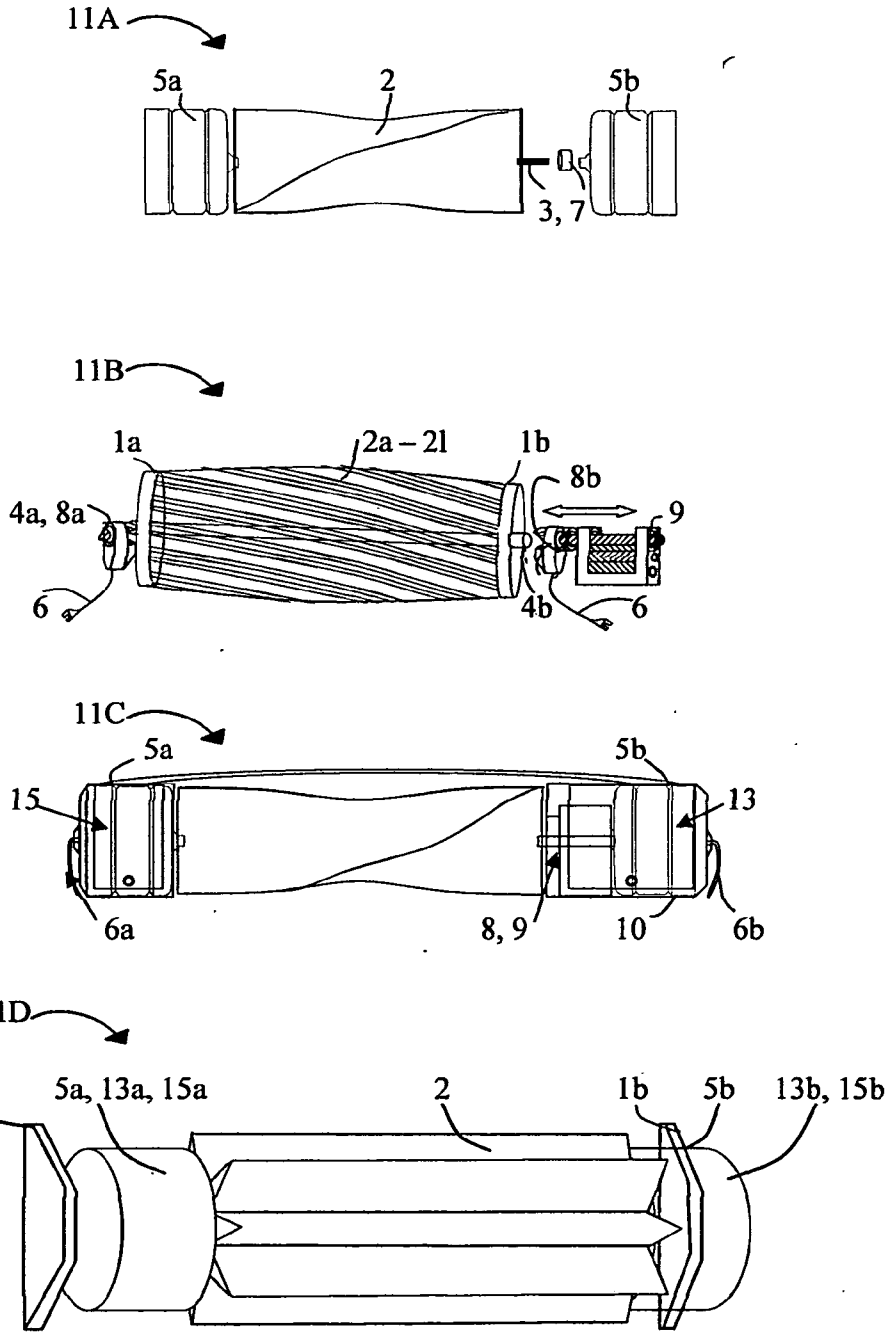
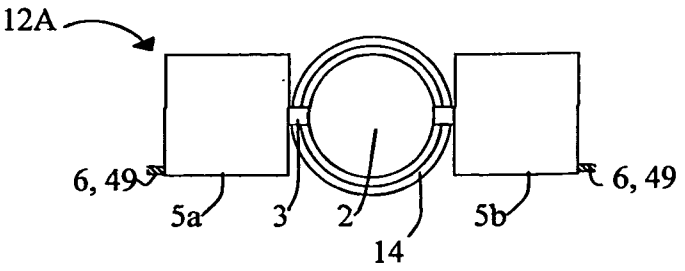
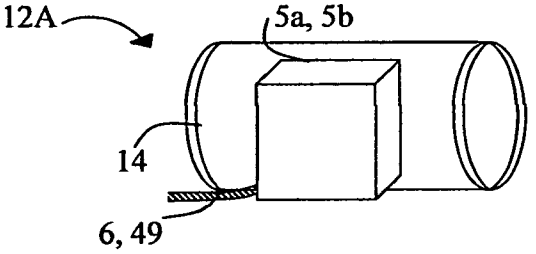

11A
5a
2
5b
3, 7
11B
1a
2a – 2l
1b
8b
9
4a, 8a
6
4b
6
11C
5a
5b
15
13
6a
8, 9
10
6b
11D
1a
5a, 13a, 15a
2
1b
5b
13b, 15b

FIG. 1


12A
6, 49
5a
3
2
14
5b
6, 49


12A
5a, 5b
14
6, 49

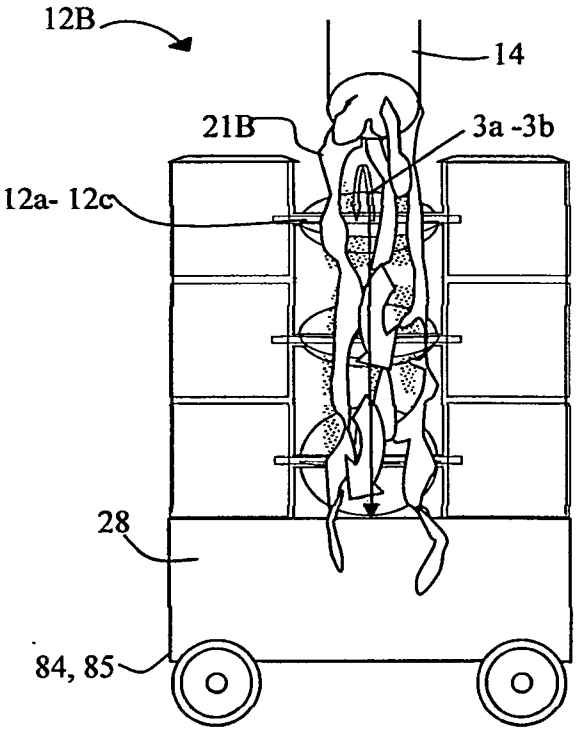

12B
14
21B
3a -3b
12a- 12c
28
84, 85

FIG. 2

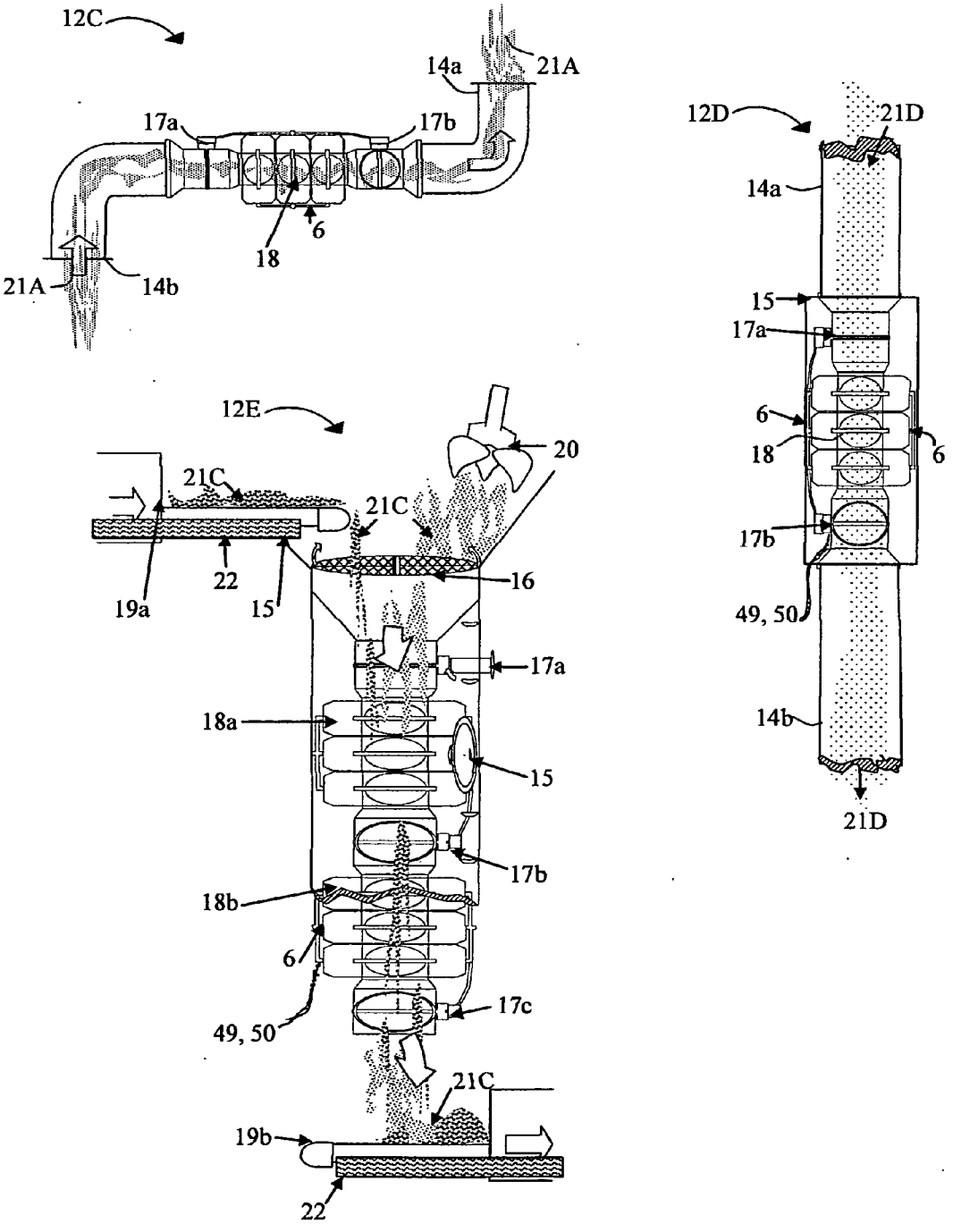

12C
14a
21A
17a
17b
6
18
21A
14b
12E
20
21C
21C
22
19a
15
16
17a
18a
15
17b
18b
6
49, 50
17c
21C
19b
22
12D
21D
14a
15
17a
6
18
6
17b
49, 50
14b
21D

FIG. 3

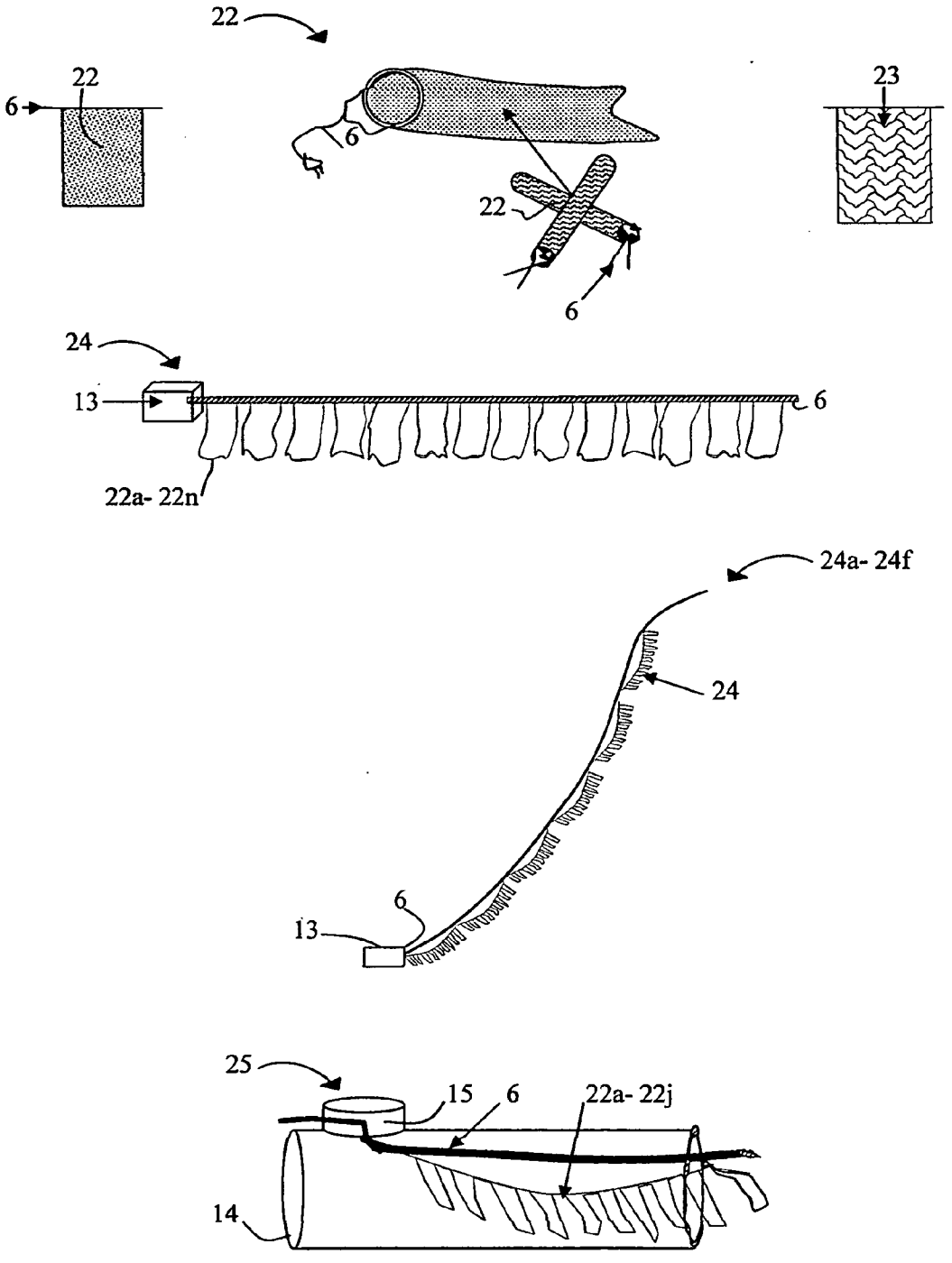


FIG. 4

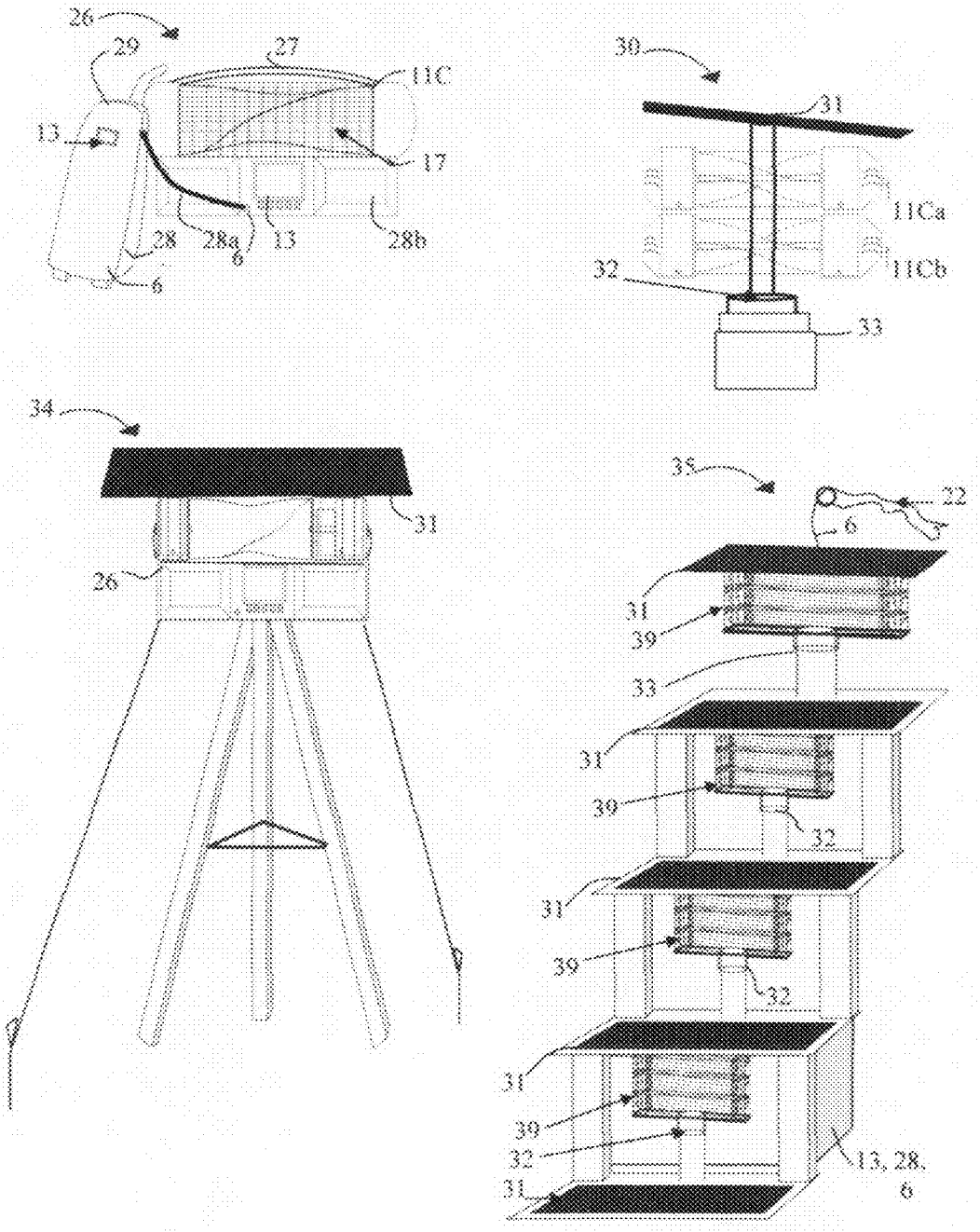

26
29
27
11C
13
17
28
28a
13
28b
6
30
31
11Ca
11Cb
32
33
34
31
26
35
22
6
31
39
33
31
39
32
31
39
32
31
39
32
31
13, 28, 6

FIG. 5

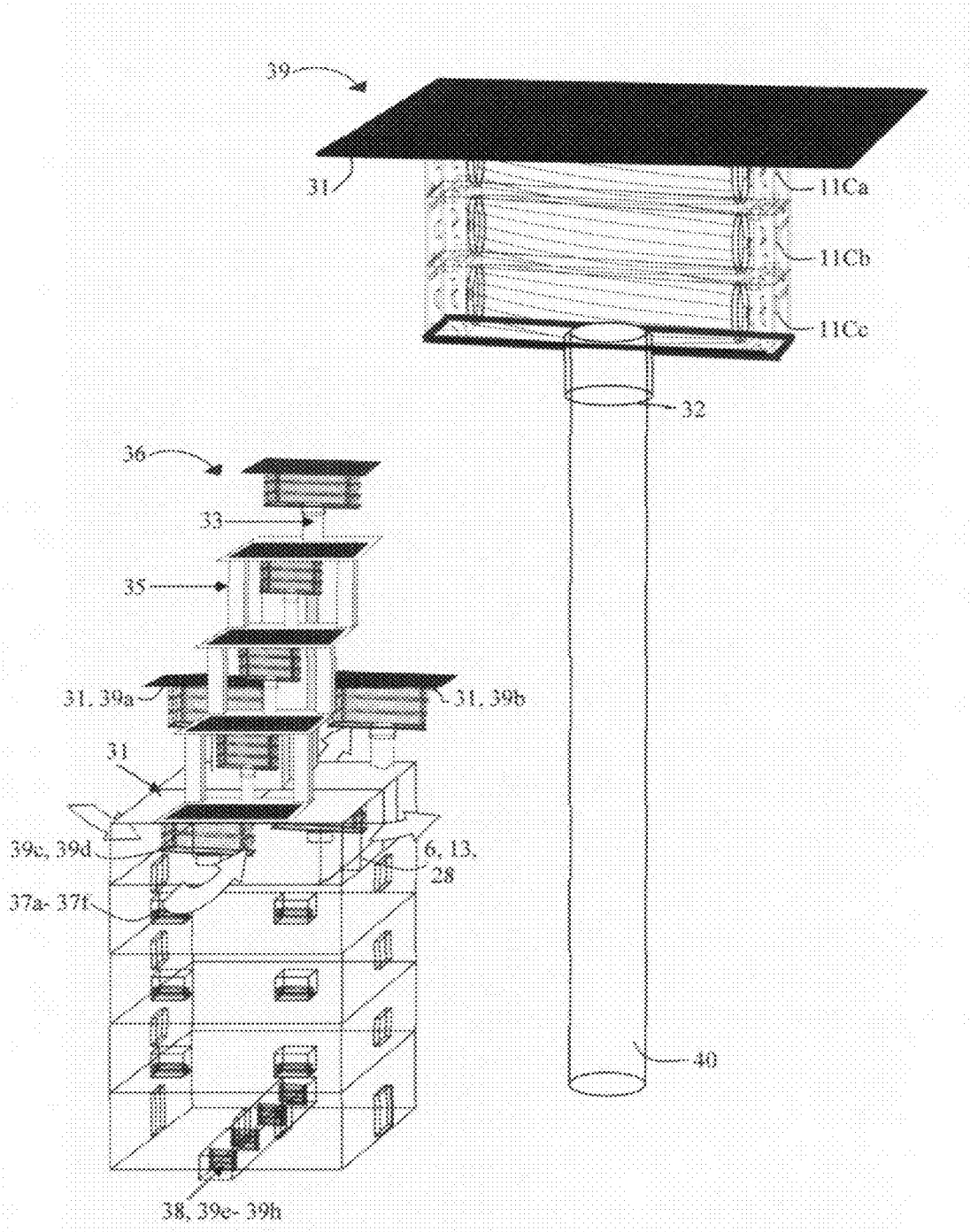
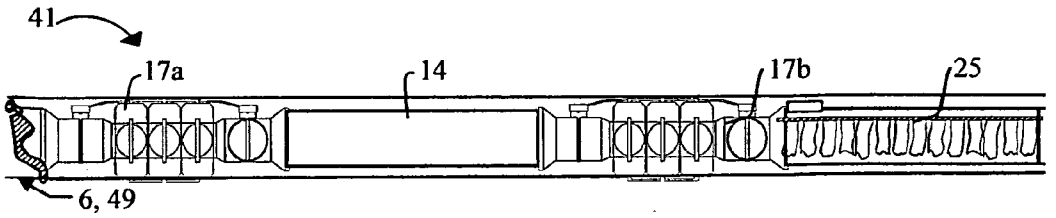
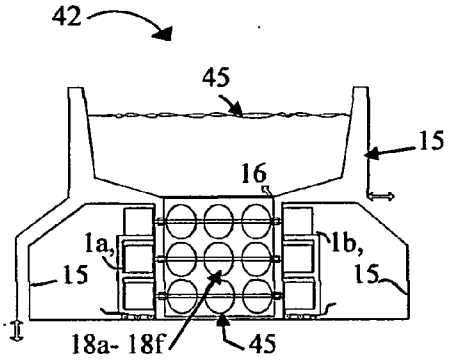

39
31
11Ca
11Cb
11Cc
32
36
33
35
31, 39a
31, 39b
31
39c, 39d
6, 13, 28
37a- 37f
40
38, 39e- 39h

FIG. 6


41
17a
14
17b
25
6, 49


42
45
15
16
1a,
1b,
15
15
18a- 18f
45

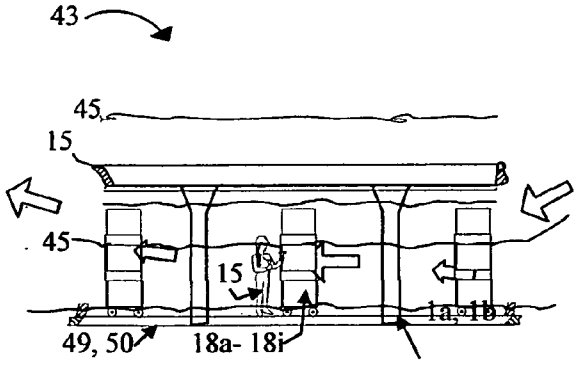
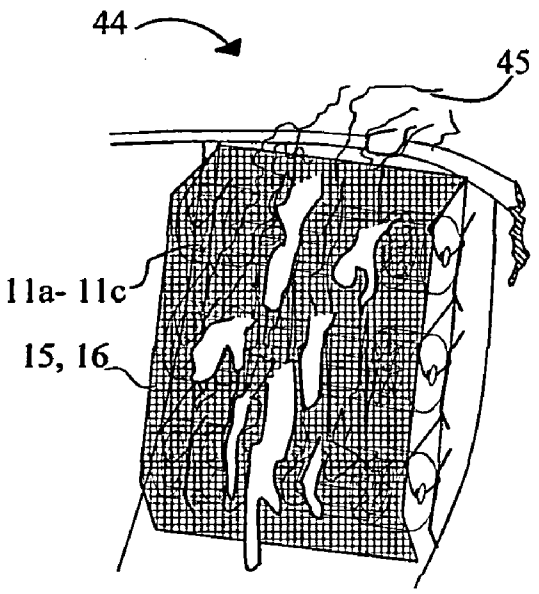

43
45
15
45
15
1a, 1b
49, 50
18a- 18i

FIG. 7



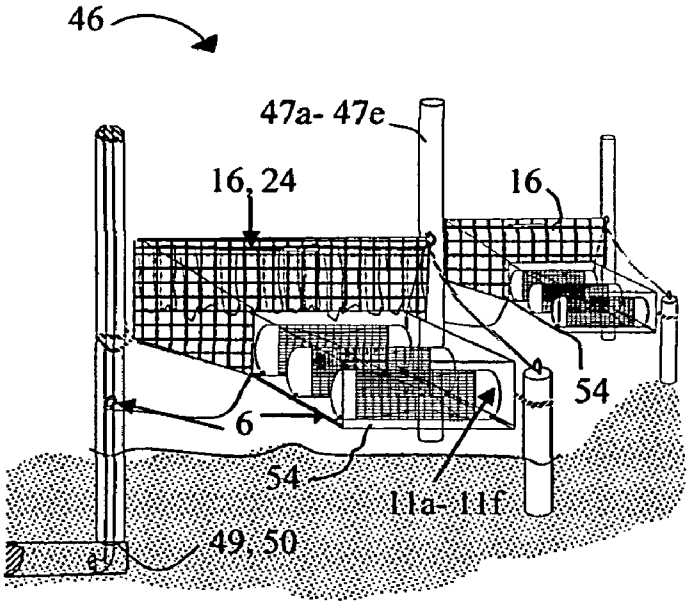


FIG. 8

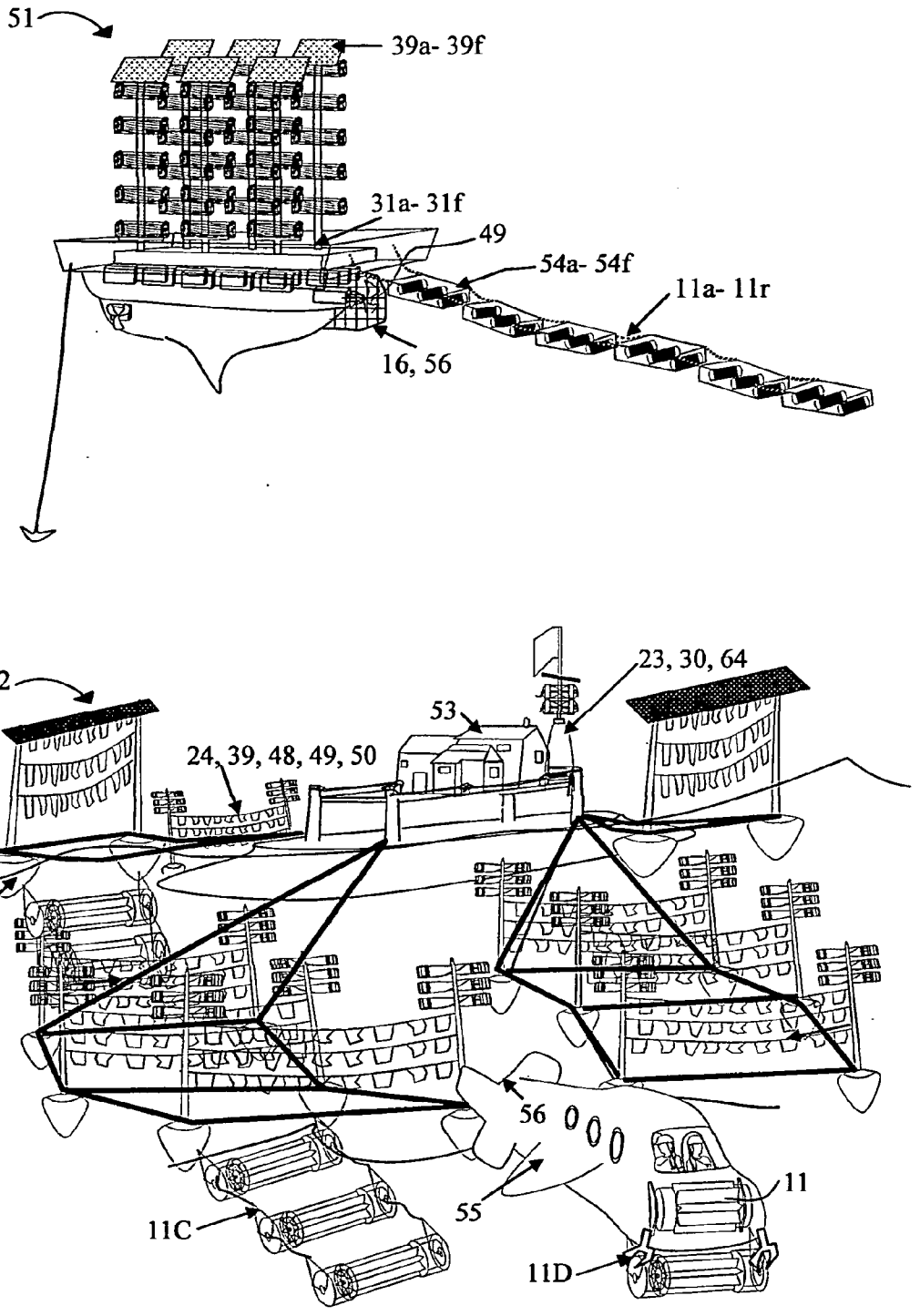

51
39a- 39f
31a- 31f
49
54a- 54f
11a- 11r
16, 56
52
23, 30, 64
53
24, 39, 48, 49, 50
48
56
55
11
11C
11D

FIG. 9

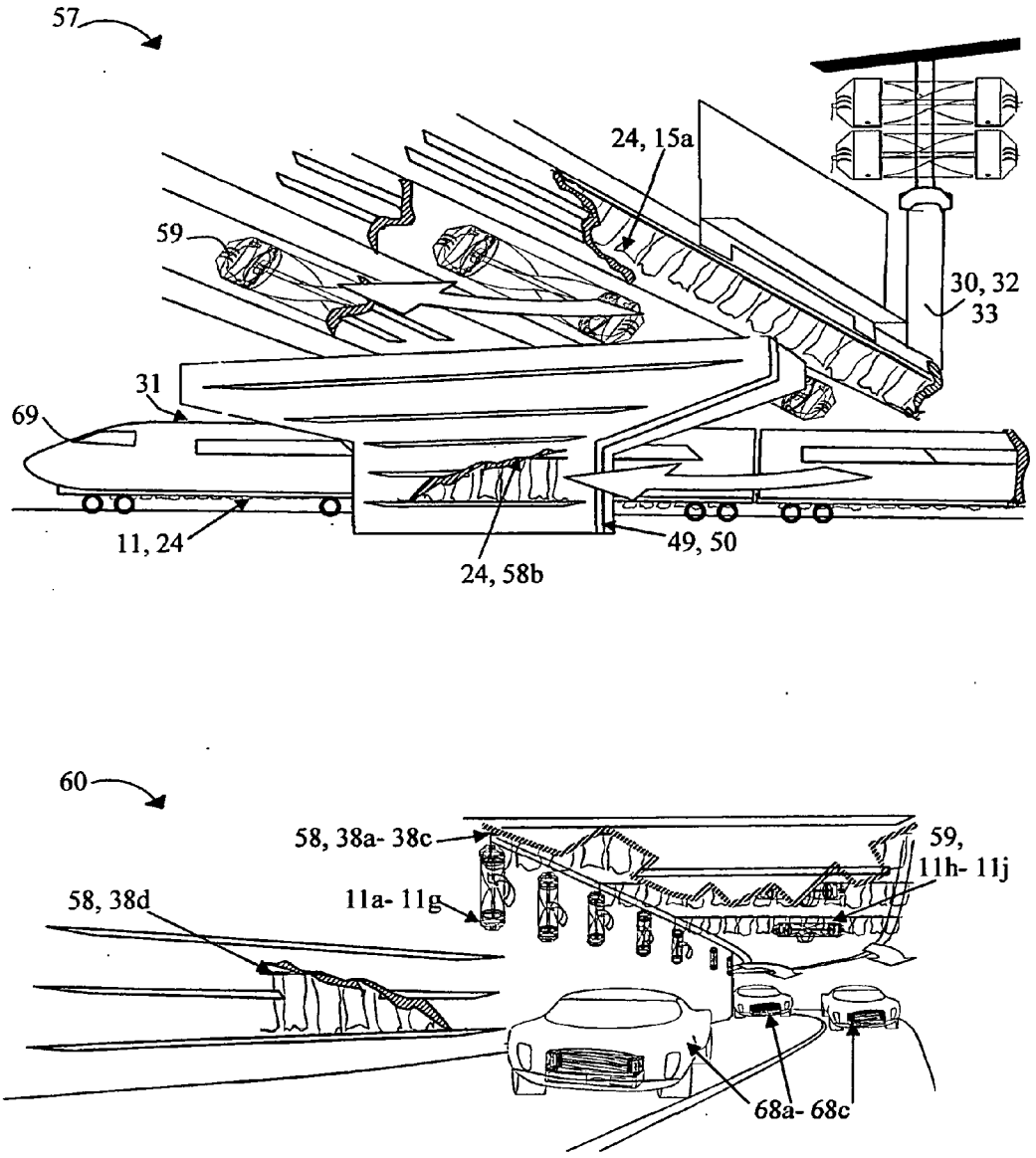

57
24, 15a
59
30, 32
33
31
69
11, 24
49, 50
24, 58b
60
58, 38a- 38c
59,
11h- 11j
58, 38d
11a- 11g
68a- 68c

FIG. 10

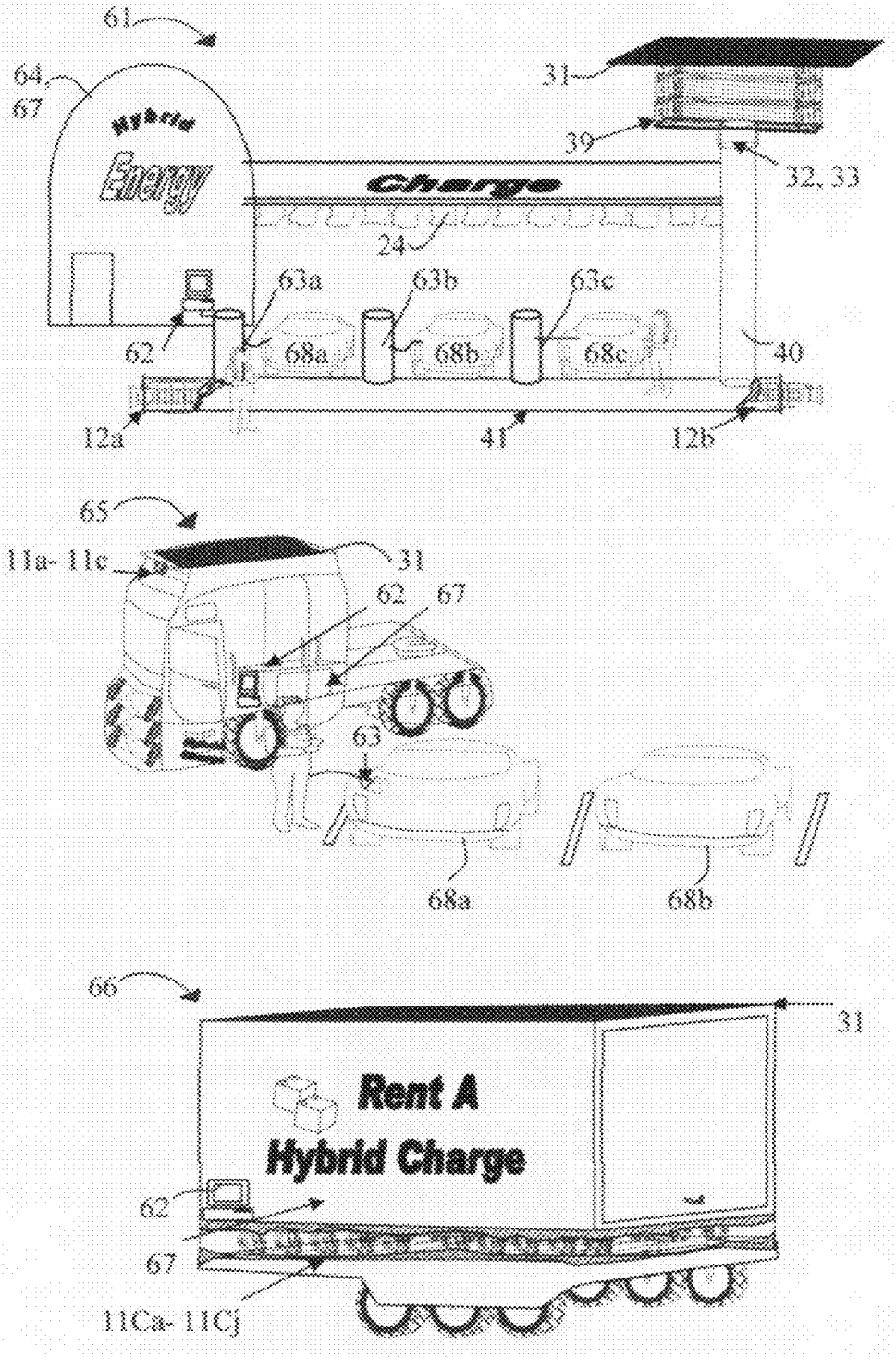

61
64
67
Hybrid
Energy
31
39
32, 33
Charge
24
63a
63b
63c
62
68a
68b
68c
40
12a
41
12b
65
11a- 11c
31
62
67
63
68a
68b
66
31
Rent A
Hybrid Charge
62
67
11Ca- 11Cj

FIG. 11

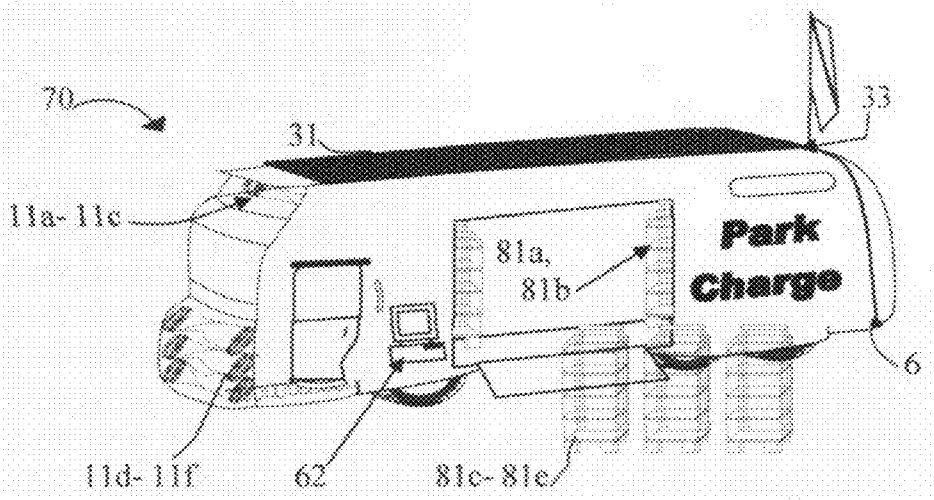

70
31
33
11a- 11c
81a,
81b
Park
Charge
6
11d- 11f
62
81c- 81e

FIG. 12

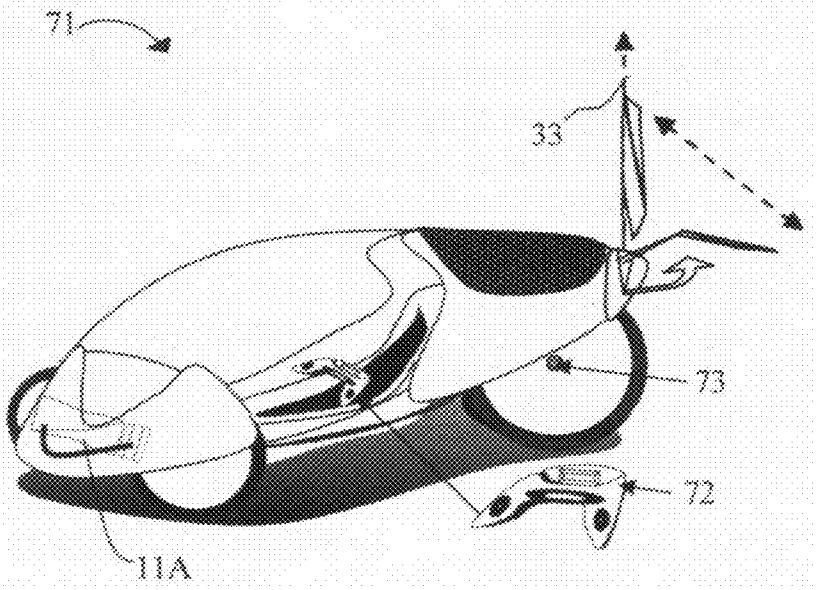
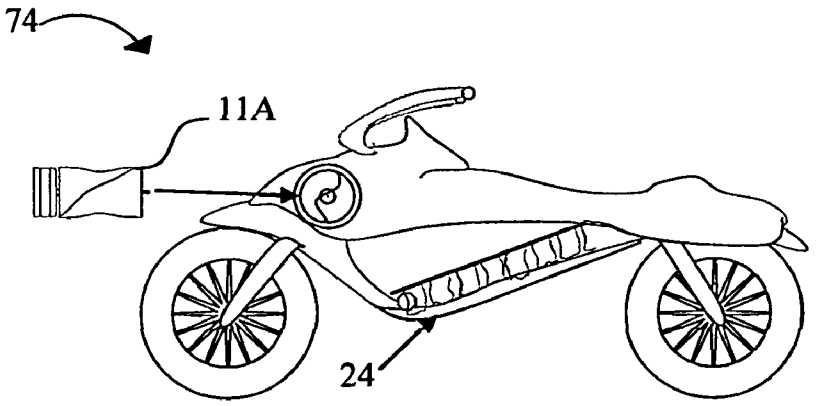

71
33
73
72
11A

FIG. 13



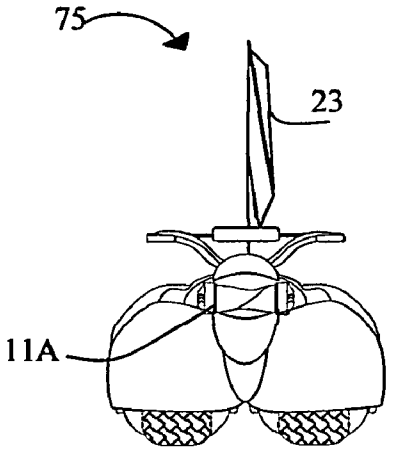


FIG. 14

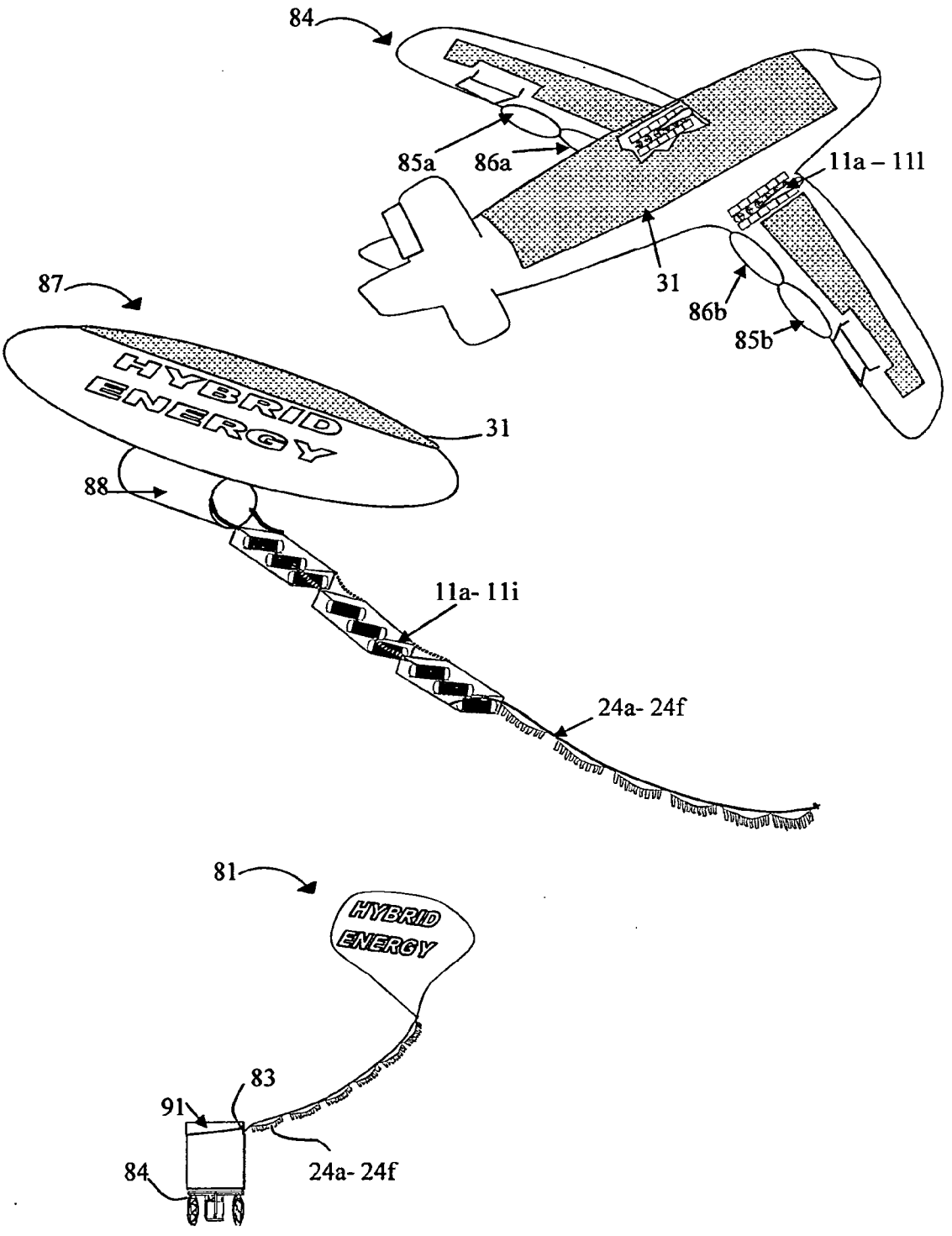
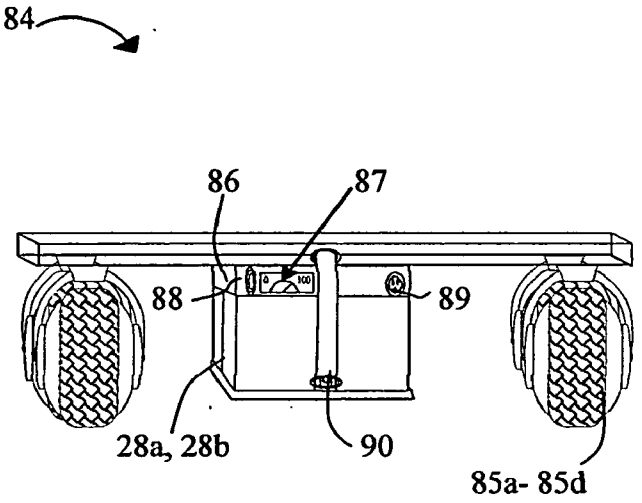

84
85a
86a
11a – 11l
31
86b
85b
87
HYBRID ENERGY
31
88
11a- 11i
24a- 24f
81
HYBRID ENERGY
83
91
84
24a- 24f

FIG. 15


84
86
87
88
89
28a, 28b
90
85a- 85d

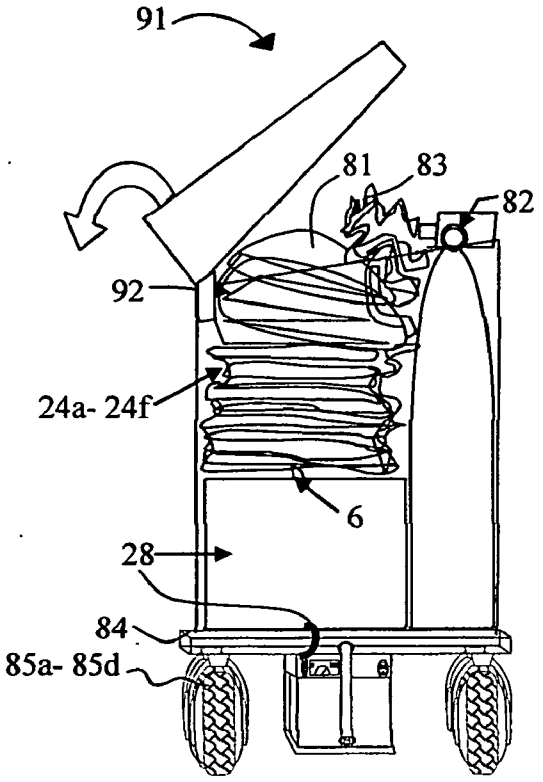

91
81
83
82
92
24a- 24f
6
28
84
85a- 85d

FIG. 16

HYBRID ENERGY SYSTEM

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH & DEVELOPMENT

[0001] Non Applicable

THE NAMES OF PARTIES TO A JOINT RESEARCH AGREEMENT

[0002] Non Applicable

BACKGROUND OF THE INVENTION

[0003] 1. Field of the Invention

[0004] This application relates to a hybrid energy system comprising collaborating kinetic energy turbine systems, turbine valves and pipes, solar power and piezoelectric devices which generate substantially more electricity at the same site, and also network controllers manage the electricity power on site and off site accordingly.

[0005] 2. Description of the Related Art

[0006] As related art discloses, it is generally well known that there are wind turbines, hydroelectric turbines, piezoelectric systems and solar energy systems that are placed individually at a setting to generate electricity power. For example, related art discusses a giant wind turbine which requires about thirty acres and does not include a secondary power generating system on the same site. Wind turbine farm are not designed to allow a second, a third and even a forth system which is inefficient, and also waste resources.

[0007] More specifically, the present kinetic energy system application discloses more than two energy producing methods on the same site and vehicle. A preferred site comprises an assortment of electric generating devices to partner and make more power together which is sensible and profitable. Related art does not discuss a preferred site which using power production methods by partnering on the same site or vehicle hydroelectric turbines, kinetic energy turbine valves for infrastructure pipelines, portable modular solar stacking awning, giant wind turbines that support solar power panels. Nor does related art discuss using kinetic energy pipe inserts which include piezoelectric generating devices with an internal controller. More so, the application discloses a novel network control system to manage battery storage containers delivered by autonomous hybrid service vehicles and also off shore hybrid power vessels with docking submarine.

[0008] Furthermore a factory employing a hybrid energy system on site increases energy power production most efficiently compared to a factory without a hybrid energy system. In particular, employing a hybrid energy system to power machines reduces grid energy and production cost. A hybrid vehicle and a hybrid vessel generates electricity effectively and thus extends long range mileage, and generates surplus power to store in battery banks for network consignment. Plausibly, a novel hybrid airplane can extend flight mileage by using corresponding sets of jumbo jet engines to work in conjunction with sets of electric turbine motors. The application discloses novel methods for hybrid mass transit rail and the infrastructure to power the rail system as well as other novel renewable energy production methods and productive hybrid energy solutions.

BRIEF SUMMARY OF THE INVENTION

[0009] A Hybrid Energy System utilizes more than one electric energy generating method at the same site. A hybrid energy system site employs all types of on site machines, equipment and fabrication systems having forced matter and pressurized pipes systems. A hybrid energy system kinetic energy turbine is diversely portable and modular and integrates on rooftops, skyscrapers, bridges, tunnels and on freeway overpasses, and also underpasses, in rivers and stream and in aqueducts. Wherewithal, a business enterprise can employ a hybrid energy system comprising kinetic energy turbines and turbine valves which are activated by the flow of liquid, solid and gaseous matter.

[0010] A business or a preferred site may incorporate any and all of the following hybrid system energy producing components such as; piezoelectric valves and hydro-piezoelectric power generating devices, piezoelectric wind panels and solar power panels to work in conjunction with each other to generate substantially more power on the same site. The said hybrid energy components all comprise a controller with sensor array to manage the hybrid device on site, and also the controller communicates the operation status with the utility company headquarters mainframe. A hybrid energy system controller manages the AC or DC power to charge battery banks on site. The hybrid energy system controller also shunts electricity power to the grid via on and off shore transmission cable network.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0011] FIG. **1** shows perspective configurations of modular kinetic energy turbines and methods.

[0012] FIG. **2** shows perspective configurations of kinetic energy turbine valve methods.

[0013] FIG. **3** shows perspective configurations of controlled turbine valves.

[0014] FIG. **4** shows a perspective configuration of kinetic energy piezoelectric device methods for wind force, air ducts such as heat and air conditioning, and for a kinetic valve.

[0015] FIG. **5** shows perspective configurations of various portable wind turbine units, a portable snap on solar power device, and also a configuration of a stacking modular tower.

[0016] FIG. **6** shows a perspective configuration of a hybrid building with a hybrid modular tower, and also a giant hybrid wind turbine array with a giant solar panel.

[0017] FIG. **7** shows a perspective configuration of infrastructure pipeline integrating turbine valves and piezoelectric pipe inserts for hydro-piezoelectric and also work in, and also shows hydroelectric systems which are above and below ground level aqueduct, and work also as thermoelectric power stations.

[0018] FIG. **8** shows two perspective configurations of a hybrid energy method for a dam or spillway, and also for rivers, streams, and also for coastline tidal and wave.

[0019] FIG. **8** shows a perspective configuration of hybrid energy system integrated with an off shore business enterprise and a off shoe power plant system having various hybrid energy devices which operate on and below the ocean surface, and also shows an off shore service station and battery charge methods to extend long range mileage for a vessel or mega barge and shunts power to on shore grid network.

[0020] FIG. **10** shows a perspective configuration of hybrid energy system integrated with an overpass and an underpass, and also shows a high speed rail system powered by hybrid energy to extend long range mileage.

[0021] FIG. **11** shows a perspective configuration of hybrid energy system integrated with a tunnel and arrows depict turbulent force caused by traffic flow.

[0022] FIG. **12** shows perspective configurations of hybrid energy system for service stations and battery charge methods.

[0023] FIG. **13** shows a perspective configuration of hybrid energy vehicles.

[0024] FIG. **14** shows a perspective configuration of various an airplane and inflatables.

[0025] FIG. **15** shows a perspective configuration of an autonomous battery charging cart and portable electricity generation method.

DETAILED DESCRIPTION OF THE INVENTION

[0026] Hereinafter, a hybrid energy system will be described in details with reference to the drawings and the identical parts in the drawings are assigned the same reference numerals.

[0027] Referring now in greater detail in FIG. **1**, a hybrid energy system illustrates various configurations for portable kinetic energy turbines **11**A-**11**D and various methods include a kinetic energy turbine **11** supporting armature **1**, frame support **2**, blade type **3**, a shaft **4** or two rods **4***a*, **4***b*, a generator or an alternator **5** A/C or D/C, electrical wiring **6**, manual coupling **7**, or electromagnetic coupling, electromagnetic coupling **8** which acts as a break, a gear box **9** which are contained within a nacelle **10**, an encasement **15** with a hinged door with lock. Support armature **1** can mean a can, a rim, cable, brackets, and robotic arms.

[0028] FIG. **11**A illustrates a configuration of a kinetic energy turbine comprising one generator **5***a*. The turbine rod **3** may or may not be manually coupled **7** with a second generator **5***b*.

[0029] FIG. **11**B illustrates a configuration of a kinetic energy turbine comprising a two cans **1***a*, **1***b* which rivet to a set of bead rolled metal convex blades. Also, an electromagnetic coupling **8***b* is to engage or disengaging generator rotor **5***b* and with the blade rod **4***b*. When high velocity momentum is present the said turbine controller **13** manages an electromagnetic coupling switch to link coupling **4** with the shaft of the ratcheting gearbox **9** as shown by arrow to increase RPM for generator rotors **5***a* and **5***b*.

[0030] FIG. **11**C illustrates a configuration of a kinetic energy turbine **11**B comprising controller **13** to manage a gear box housed within a nacelle **10**. The gearbox controller shuts down the electric magnetic coupling to prevent damage to the gearbox. The said electromagnetic bearing coupling **8***a* and generator **5***a* are protected by encasement **15** an optional collapsing handle **27** may be utilized. By collapsing the handle down a second and third turbine unit **11** can be stacked above as become a turbine array **39**.

[0031] FIG. **11**D illustrates a configuration of a kinetic energy turbine comprising a hydroelectric turbine having heavy duty blades with protective coating and submersible generators **5***a*, **5***b*, and also having wire array **6**, and as well with supporting armature **1***a*, **1***b*.

[0032] Referring now in greater detail in FIG. **2**, a hybrid energy system illustrates a perspective cut through view inside turbine unit **11** as shown generators **5***a*, **5***b* are set outside the pipe **14** and a valve device **12**A with blade **3** is set inside pipe **14**.

[0033] The valve device **12**A is shown at a side angle and couples with a pipeline **41** and power cable **6** and **49** subsequently connects accordingly. The valve device **12**A does not include a controlled valve gasket **17**.

[0034] In greater detail in FIG. **2** also shows **12**B is a mobile kinetic energy turbine array **11***a*-**11***c* that can be set under a pipe **14** and as illustrated water or **21**B liquid which forcefully activates blades **3***a*-**3***c* crank generators **5***a*-**5***c* rotors. The kinetic energy turbine array **12**B can be transported by an autonomous cart base **84** with omniwheel motorized casters **85**, and power can be stored in battery bank **28**.

[0035] Referring now in greater detail in FIG. **3**, a hybrid energy system illustrates a configuration of a turbine valve device with gasket flange **17** including controller **13** having cell phone satellite communication capability, and also GPS. A turbine valve array **18** comprising at least three generators having blades with a surface coating or a repellant. A kinetic energy valve **12** is managed by a device controller having GPS **13**, pipe **14**, and can be contained within a structure or a housing compartment with an access means **15**. A funnel vat which empties into a vent guard **16** allows forced matter to drop into the valve device **17**. An autonomous pipe valve with controller having cell phone and satellite communication **17** can be monitor by the network. When a malfunction happens a sensor signals the controller **17** to shut valve flange therein.

[0036] A generator array with blades **18**, having a surface coating that repels organism growth and plausible blades may have a tactile shark scale texturing. Configuration **12**C-**12**E illustrates various methods which integrate at least one kinetic energy turbine valve with three generators in the array, and accordingly more turbine generator can be added to increase energy production. As illustrated matter is a force substance in FIG. **12**C shows steam **21**A, and in FIG. **12**D pressurized liquid or gas **21**D, and also FIG. **12**E shows **21**C as hard matter and perceptibly other types of matter can work. Pipe and valve can be vertical, horizontal and pipe couple to existing pipes in refineries and oil rigs, water treatment plants, dairies and wherever suited.

[0037] A conveyer system **19** allows matter flow to spill out onto the vent guard and fall onto blades. A debris claw **20** allows forced matter and ingredient substance **21** to dump out onto blades and fall though to exit downwardly.

[0038] A preferred hybrid energy system pipe line may have pumped in or pumped out pressurized gases, liquids and also non-inert matter that spews and pours undulating heavy duty turbine blades. A controller monitors this process until halted by controller mode off switch.

[0039] As well, preferred sites may select to utilize turbine valves which are activated by forced steam, liquid, dry matter and debris. A conveyer **19** and a debris claw **20** forcefully topples matter **21** which undulates the piezoelectric panel **22** set under the said conveyer belt to generate electricity. Each turbine blade is activate and thus via rod or shaft cranks generator rotors and this process is repeated until halted by controller mode off switch.

[0040] Referring now in greater detail in FIG. **4**, a hybrid energy system illustrates a configuration of various piezoelectric devices and application methods, piezoelectric device with crystals **22**, a plausible sharkskin surface or repellant coating **23**, piezoelectric array **24**, piezoelectric pipe valve with controller having cell phone and satellite communication **25**, a portable wind turbine power system **26**.

[0041] A kinetic energy method comprising various piezoelectric devices can be activated by wind, water, also by pressurized force. As well, said piezoelectric devices work in novel applications such as set inside pressurized pipes, and

inside a vented housing, and also in pipelines placed wherever. A building with air ducts and an air conditioning system can integrate the said piezoelectric array to generate electricity power, and also wire **6** connects to control system sensors placed where ever suited to see the an activity is being carried out.

[0042] Referring now in greater detail in FIG. **5**, a hybrid energy system illustrates a configuration of various portable turbine units with vent guard **16**, and solar power **31** and shown with stacking modular array **11**Ca-**11**Cd or **39**.

[0043] A portable wind turbine power system **26** includes a collapsing handle **27**, at least two 12V batteries **28***a*, **28***b*, and a portable battery caddy **29** with controller having GPS **13** with cable plug, outlet and in let, and also wire **6** arrays with sensors.

[0044] A modular hybrid solar power stand or wind turbine telescope device **30** includes a solar panel **31** or film layer, and a motorized swivel device with microchip control **32**, and an optional actuating telescoping device **33**.

[0045] A modular hybrid solar power and wind turbine array **30** is a pole having a motorized telescope device **33** which sets as a pinnacle, and also sets on a vehicle roof when parked.

[0046] A portable tri pod stand **34** supporting a wind turbine power system **26** is including a solar panel **31** that snaps on and off, at least two 12V batteries **28***a*, **28***b*, and having a preferred anchoring method.

[0047] A stackable modular awning **35** is set to piggy back which exposes solar panels better, as well as allows concentrated wind speed to contact wind turbines **11**Ca-**11**Cd.

[0048] A plurality of said modular awnings **35** are to set on the ground, as well as to set on the roof of a skyscraper, a building, and on land turbine farms also, wherever else suited.

[0049] Various portable wind turbine units may or may not include a portable snap on solar power device that can comprise a controlled motor with sensors to automatically adjust by actuating to tilt and swivel into the direction of the sun.

[0050] Referring now in greater detail in FIG. **6**, a hybrid energy system illustrates a configuration of various kinetic energy turbine devices and application methods on and in a building **36** with stacking modular awning(s) **35**.

[0051] A hybrid building **36** includes a wind turbine array **11**Ca-**11**Ch, and solar power panels **31**.

[0052] FIG. **6** as well shows a configuration of a giant wind turbine **39** set adjacent to said building **36**. The giant wind turbine **39** comprises at least one giant wind turbine **11**C. As shown a wind turbine array comprising a stacking array **11**Ca-**11**Cc or numbered **39** which is set upon a giant motorized tower **40**. The said wind turbine tower **40** automatically swivels into the wind via a controller motor **32**.

[0053] A giant wind turbine farm can employ wind turbine array supported by giant towers. The wind turbine farm may be set on and off shore.

[0054] Referring now in greater detail FIG. **7**, a hybrid energy system illustrates a configuration of perspective configurations of hydroelectric infrastructure for a pipeline **41** and an aqueduct above ground **42**, and also an aqueduct below ground **43**.

[0055] The configuration for a pipeline **41** is shown integrating turbine valves **17***a*, **17***b*, and piezoelectric pipe inserts **25**, and system pipe **14** without a device. The pipe is housed underground or is housed on a preferred site such as at a factory supplied by pipeline systems.

[0056] The underground pipeline harnesses the insulated wire **6** and sensor array, not shown. The pipeline **41** also accommodates and houses underground network power grid cable **49**.

[0057] Also in FIG. **7**, a hybrid energy system illustrates an aqueduct above ground **42**. The hydroelectric turbine array is supported by armature stand **1***a*, **1***b*, which can be wheeled around to access via internal structure **15** on right or **15** on left.

[0058] A vent guard **16** allows the maintenance worker access and also is eco friendlier for fish. The generators are set on the internal side **15** and the water flow **45** is channeled to turn the hydroelectric turbine generators and blades **18***a*-**18***f* and also more blade types.

[0059] Also in FIG. **7**, a hybrid energy system illustrates an aqueduct below ground **43**. The hydroelectric system is set underground where water is natural forced to enter and exit as shown by the arrows. The said subterranean aqueduct **43** is ideally suited to be placed under rivers and streams Similar to an aqueduct above ground **42** the subterranean aqueduct **43** is supported by pillars **1***a*, **1***b*, and also employs other preferred site methods.

[0060] The internal structure **15** on right or **15** on left allows the maintenance worker access and also a vent guard is set vertically at the aqueduct entrance. The generators are set on the internal side **15** and the water flow **45** is channeled to turn the hydroelectric turbine generators and blades **18***a*-**18***f* and many more blade types.

[0061] Referring now in greater detail FIG. **8**, a hybrid energy system illustrates a configuration of a dam **44** with or spillway. The hydroelectric turbine having heavy duty blades with protective coating and sealed generator **11**Da-**11**Dc is anchored or is suspended by cable and thus directly set in the spill flow **45**. Network cable **49** and **50** is protected by site system conduit accordingly.

[0062] A control system **13** sends surplus energy to on site electrical components and can shunt extra power to the grid. A hydroelectric aqueduct can be dams and spillways above ground and also tunneled underground. A hydroelectric turbine array can be set on a beach to capture wave and tide force.

[0063] As shown in FIG. **8**, a configuration of a wave or tidal turbine array **46** anchored off shore by eddy **47***a*, **47***e*. The underground network cable **49** and **50** is buried beneath as shown cut through. A floating buoy pilling can stabilize a wafting tidal turbine array **46** anchored on the water surface **46** or on a spillway, and on rivers and streams docks or ocean side piers and locks.

[0064] Referring now in greater detail FIG. **9**, a hybrid energy system illustrates a configuration of hydroelectric energy producing methods for tidal hydroelectric energy producing methods and in FIG. **9**, hybrid vessel **51** includes a control system **13** that manages the battery charging process which extends long range mileage for said vessel, and shunts power to another vessel or shunts extra power to an on shore grid network.

[0065] A hybrid vessel or barge **51** also includes a wind turbine array **39***a*-**39***f* and solar power panels, and also the motorized tower **31***a*-**31***f*, hydroelectric turbine housing **54***a* **54***f* with **11***a*-**11***r* which is towed, and vent guard **16** protect the propeller **56**, and also insulated wire **6** and cable **49** subsequently connects with network grid cable **50**. A control system **13** sends surplus energy to on site electrical components and can shunt extra power to the grid.

[0066] In FIG. **8**, **52** shows an off shore hybrid power plant integrated with an off shore business enterprise. An off shore

service station and battery charge methods to extend long range mileage for a vessel or mega barge, and also a control system **13** sends surplus energy to on site electrical components and the controller shunts power to an on shore utility grid network.

[0067] A hybrid energy system comprising novel hydroelectric mega vessels can float an off shore, and comprising a utility grid transmission system which stores kilowatts in battery containers and battery pods to consign later on.

[0068] An off shore grid network comprising a grid transmission network control system which collaborates with said mega vessels and barges to stock pile voltage onboard in a battery said container, and also controls the container devices pending outcrop shipment.

[0069] Also shipping said battery containers to utility grid companies and businesses on shore and to cruise lines for emergency power.

[0070] An off shore grid company transmits electrical energy underground sea to shore cable system to distribute net power on shore accordingly. A mega vessel garages a novel hybrid submarine which is employed for underwater hydroelectric power system monitoring and maintenance. An off shore headquarters **53** and an off shore power plant system **52** having various hybrid energy devices sharkskin surface or repellant coating **23**, piezoelectric array **24**, hybrid solar power and wind turbine telescope device **30**, stacking kinetic energy turbine array **39**, floating buoy tower **48**, charging store **64**, and also with insulated cable and plug **49** which subsequently connects with network grid cable **50**.

[0071] A submarine vessel **55** with an electric motor **56** is power by an external hydroelectric turbine and surfaces to dock on the station **52**. The sub vessel **55** maintenances the turbine farm with robotic armature **1***a*, **1***b* is shown to be clasping on to turbine **11**D underneath the sub vessel **55** which operates to install aforesaid devices on and below the ocean surface.

[0072] Referring now in greater detail FIG. **10**, a hybrid energy system illustrates a configuration of methods for infrastructure system utilizing hybrid energy to powering bridges and tunnels. A preferred kinetic energy turbine site can be modular units placed on existing roof tops, land farms and off shore power plants. A novel hybrid energy system integrates with infrastructure, roadways, under and overpasses, roadways, bridges, tunnels.

[0073] A hybrid energy system controller manages multiple power production systems on site and automatically shuts down power production to prevent overload. A control system **13** sends surplus energy to on site electrical components and can shunt extra power to the grid.

[0074] FIG. **10** is showing a depiction of an overpass and underpass **57** comprising wind turbine solar power panel **31**, **33** piezoelectric panels **24***a*, and **24***b* are housed in vent or duct **58***a*, **58***b*. A high speed rail train **69** depicts the action to cause turbulent activity.

[0075] Also FIG. **10** is showing a depiction of a tunnel **60** comprising piezoelectric panels **24** housed in ceiling. A cut through view shows the ceiling and the wall **15** having elongated vent ducts **58**, and also the wind turbines **11**C are housed in the ceiling and wall ducts **59**. A control system **13** sends surplus energy to on site electrical components and can shunt extra power to the grid.

[0076] The tunnel lights and pumps are powered by generators and piezoelectric devices activated by kinetic energy air turbulent. The electric cars **68***a*-**68***c* show the portable wind turbine unit **26** is set inside the front boot to extend long range mileage.

[0077] Referring now in greater detail FIG. **11**, a hybrid energy system illustrates a configuration of various perspective views of hybrid energy powering station and battery bank consignment and battery charge methods to extend an electric vehicle's **68** long range mileage.

[0078] A hybrid energy commercial vehicle and service stations can ship transportation-all generated power to rural and metro homes, buildings, and to communities on and off grid power. Accordingly a vehicle type can utilize the renewable energy power system and wind turbine apparatus in various ways for consumer applications and electrical components in doors and out.

[0079] One or more wind turbine apparatus can be anchored in any given manner with and with out a vented housing, and placed accordingly such as horizontally or perpendicularly, to stack, or be in a group alignment inside and outside the vehicle cab and vehicle body as shown with utility vehicle **65** and commercial vehicle **70**.

[0080] A kinetic energy power service station **61** can be situated over an underground water treatment plant and pipe network system **41** with valves **11***a*, **11***b*, and also wind and solar array solar panel or film **31**, motorized rotational device **32**, actuator telescoping device **33**, tri pod **39** and a giant tower **40**. As well, the station is self service store **64** which houses the battery **67**. The station is self service store **64** also stores and sells portable charge containers **67** which can be consigned by a business to charge employees vehicle's at work and thus container remains on site until nearly spent upon the next replacement scheduling via automated control system **62** with payment such as a Pay Pal system.

[0081] An automated control system **62** and payment system, and a plug-in charge port **63***a*, **63***c*, and provide as service application by shipping and delivering, exchanging and recycling spent battery's for fully charged batteries.

[0082] As shown, a utility vehicle **65** provides a service which is on call or via an appointment in order to charge and recycle spent electric vehicle batteries as the depictions shown the car **68** is being charge in a parking lot as controller **62** automatically manages charge plug in portal **63**, and also battery **67** storage level.

[0083] As shown, a kinetic energy power service utility trailer **66** delivers a fully charged battery container to homes, businesses, and also does not discuss hospitals and when power is nearly depleted the hybrid energy controller **62** automatically schedules a time to delivery a fully charged battery container **67**.

[0084] Referring now in greater detail FIG. **12**, a hybrid energy system illustrates a configuration of various shows a perspective configuration of a commercial vehicle **70** and service which ships transportation-all generated power to rural and metro homes, buildings, and to communities on and off grid power.

[0085] Accordingly a vehicle type can utilize the renewable energy power system and wind turbine apparatus **11***a*-**11***f*. In various ways for consumer applications such as shipping and delivering, exchanging and recycling spent battery's for fully charged batteries **81***a*-**81***e*.

[0086] The vehicle may or may not include the piezoelectric flag **33** or the solar panel **31**. An automated control system **62** and payment system to plug-in charge port **63***a*, **63***c*.

[0087] Referring now in greater detail FIG. **13**, a hybrid energy system illustrates a configuration of a hybrid energy vehicle **71** with inner-motorized wheels that are omni directional **73**, a piezoelectric robotic armature that is activated when vehicle is started.

[0088] A controller manages a telescoping actuator that opens a door hatch **33** (depicted by arrow) allows piezo-flag **23** to pop out, and when parked to lower back down and shut the door hatch. A vehicle type may or may not include the door hatch device **33** to rise up and out. The hand held remote controller **72** acts as a steering wheel and a foot pedal stops the omniwheel **73**.

[0089] Referring now in greater detail FIG. **14**, a hybrid energy system illustrates a configuration of a compact vehicle, motorcycle or golf cart, and also an all terrain vehicle can have the option to engage a second generator at high velocity speeds and also to disengage the second generator when speed is reduced. The turbine unit extends an electric vehicle's long range mileage until parked for battery recharging process.

[0090] As shown, a motorcycle **74** is a utility terrain vehicle and a cart too that can employ at least one or more wind turbine apparatus **11**A. A vehicle controller **13** can furnish KES voltage to motor(s) and components inside and outside the vehicle body and extends an electric vehicle's long range mileage until parked for battery recharging process. The motorcycle may or may not include piezo-flag **24**.

[0091] Also shown in FIG. **14** an ATV **75**, one wind turbine apparatus **11**A can be anchored in any given manner with and with out a vented housing, and placed accordingly such as horizontally and extends an electric vehicle's long range mileage until parked for battery recharging process.

[0092] Referring now in greater detail FIG. **15**, a hybrid energy system illustrates a configuration of hybrid air methods air blimps and balloons. A hybrid energy system works also in airplanes, blimps comprising wind turbines floating below, and as well including mounted solar panels or film, and an air balloon with a piezoelectric array is floating or hanging off the wind turbine tower.

[0093] FIG. **15** also shows blimp **87** which can carry passengers or just operate as a remote controlled blimp **88** as illustrated. The blimps balloon may comprise solar film **31** (as shown in white in stead of black background color).

[0094] Plausibly wind turbines **11***a*-**11***i* and piezoelectric devices **24***a*-**24***f* can be towed in the air to produce hybrid energy for buildings, and also is commercial renewable energy source to power homes, businesses via cable line **49**.

[0095] FIG. **15** also shows a an autonomous carrier **91** anchors a piezoelectric inflatable **81** and thus by parking a tether cable and power wire harness **83** connects to helium tank and inflates the balloon **81** which is managed by a controller comprising satellite communication and GPS **82**.

[0096] An autonomous cart base **84** comprising omniwheel motorized casters **85**, a controller **86** charger and gauge **87**, in source **88** and outsource power outlet **89**, and battery housing **90**, an autonomous carrier **91** with door hatch controller **92** is mobile. While parked an autonomous carrier **91** receives instructions from said controller **82** to open the door hatch **92**.

[0097] The autonomous cart controller shunts helium from tank **82** and inflates the balloon **81** and as said balloon **81** fills it ascends up and out of the autonomous carrier compartment **91**. The piezoelectric inflatable power wire harness **83** ascends as well piezoelectric devices **24***a*-**24***f* ascend.

[0098] Kinetic wind activates piezoelectric devices **24***a*-**24***f* and produces hybrid energy and thus, a controller **86** charger manages voltage and shunts voltage to autonomous cart **84** batteries **28**. During this charging activity this autonomous carrier **91** receives instructions from said controller **82** to close the door hatch **92** until battery if fully charged afterwards the helium tank autonomously shuts off via controller **82** and said balloon **81** deflates.

[0099] An autonomous cart base **84** comprising omniwheel motorized casters **85** is instructed via controller to shut down. The balloon is gathered by a maintenance worker and thus process is repeated.

[0100] The abovementioned as specified in generic terms may not be technologically precise and most of the devices and components can be purchased on the marketplace. It is apparent to those skilled in the art that many more entailed nuances are possible within the scope of the invention.

I claim:

1. A hybrid energy system that is to be used in a preferred site to provide electrical power, the system comprising:

hybrid energy components all comprise a controller with sensor array to manage the hybrid device on a preferred site, and also the controller communicates the operation status with the utility company headquarters mainframe,

hybrid energy system controller manages the AC or DC power to charge battery banks on site, and also a hybrid energy system controller manages multiple power production systems on site and automatically shuts down power production to prevent overload,

a hybrid energy system controller shunts electricity power to the grid via on and off shore, and also said controller shunts electricity power to the grid transmission network,

hybrid energy components are kinetic energy turbines, hydroelectric turbines, piezoelectric devices and solar energy devices which work in conjunction with one another at the same setting to substantially produce more voltage power,

a preferred site employs at least one hybrid energy system to integrate therewith in factories, buildings, homes business, hospitals and other business enterprise site suited,

a hybrid energy method integrates aforesaid hybrid energy components and devices with boats, and also hybrid energy mega vessels, ships, barges and submarines,

a hybrid energy method integrates aforesaid hybrid energy components and devices with cars, and also hybrid energy utility service vehicles,

a hybrid energy method integrates one or more hybrid energy power generation devices and control system components in, at, and on the same preferred site, and also adjacent to the preferred site,

novel hybrid energy system integrates with high speed rail infrastructure, railways, and tracks set on underpasses and overpasses, roadways, bridges, tunnels adjacent to freeways,

a hybrid energy method integrates one or more hybrid energy components with infrastructure, roadways, under and overpasses, roadways, bridges, tunnels located on and off shore,

a hybrid energy method integrates one or more hybrid energy components and control system devices in and on rivers and streams,

a hybrid energy method integrates one or more hybrid energy components and control system devices in and on aqueducts set on ground level, and also tunneled underground,

a hybrid energy method integrates one or more hybrid energy components and control system devices in and on dams and spillways,

a hybrid energy method sets one or more hybrid energy components and control system devices on a beach with wave and tidal action which activates said hydro-turbine array,

a hybrid energy method employs pipe lines with pumped in, and also pumped out matter, pressurized gases, liquids and also, non-inert matter that spews, pours and dumps which is to forcefully impact heavy duty turbine blades and thus crank generator rotors accordingly to produce electricity,

a preferred site utilizes turbine valves which are activated by forced dry matter such as debris which is transferred by a conveyer, claw dropped, spilled or filled the forceful impact activates kinetic energy turbine blades, rods which crank generator rotors to thus produce electricity on site,

a hybrid energy method integrates one or more hybrid energy components and control system devices in novel applications such as set inside pressurized pipes, and above ground and underground and in the air to produce electricity,

a kinetic energy method comprising various piezoelectric devices are activated by wind, water, and saltwater which plausibly comprises a fabricated piezoelectric panel with a waterproof shell which has shark scale texturing to discourage organism attachment,

a hybrid energy system with novel hybrid mega vessels which dock inland, and also dock off coastline,

an off shore utility grid transmission system which stores kilowatts in battery containers, and also stores DC voltage smaller battery banks,

a ship which has a network control system manages on board hybrid energy battery containers and monitors the power levels to maintain full battery charge,

on shore utility grid companies ship to hybrid energy battery containers to consignment locations by power stations to stock pile voltage on site in hybrid energy battery banks, and also trailer battery containers which maintain full battery charge pending outcrop shipment date,

a grid mega ship comprising an off shore grid transmission shunts electrical energy underground sea to shore via a large scale cable network system which distributes extra power to on shore applications accordingly, and also shunts extra electric energy to other off shore vessels,

a novel hybrid submarine which is utilized for underwater hybrid energy power system monitoring, and also for maintenance, and plausibly hydroturbine materials comprise saltwater sealants and perhaps incorporate a fish friend vent guard, and also blades are fabricated with shark scale texturing to discourage organism attachment,

a mega vessel garages a novel hybrid submarine which is employed for underwater hydroelectric power system monitoring and maintenance and employs robotic armature to manipulate operations for mechanical tactics,

a aircraft such as an airplane and a passenger blimp that comprise solar film wind turbines and piezoelectric devices to extend long range mileage,

a remote controlled blimp and an air balloon that comprises solar film wind turbines and an air balloon with a piezoelectric array can float above the solar panel or hang off the motorized tower below, and piezoelectric device produces hybrid energy in flight,

a kinetic energy power station is self sustaining when wind and sun is ample, and also a hybrid energy battery container is self sustaining when wind and sun is ample,

a kinetic energy turbine controller activates an electromagnetic coupling autonomously affixes with a second generator at high velocity energy force and also disengages the second generator when energy force is reduced,

a hybrid energy system that is to use a control network communication method enables the headquarters network control system to send data and receive data from site to site,

a communication method that is to monitor and save to file all service transactions, and also enables the headquarters network control system to report inventory, scheduled restock, and also send out purchase orders,

a control system to report status for battery banks and their monitor charge range and schedule maintenance,

an on site control system to monitor and report vehicle charge process and report the transaction sum to accounting department at headquarters,

a communication method that is to send data and receive on data automatically to monitor and report charge process as a vehicle battery is charging,

a control system to including sensor array a communicate operational status in devices,

an on site control system to that is to send data and receive data and automatically schedule surplus to be delivered by a semi truck and trailer or a train,

a communication method that is to send data and receive data automatically to schedule orders from customers requesting portable battery pods, and also consign a battery container to store at homes, businesses, and hospitals, as well as parking lots,

a communication method that is to sent data and receive on site data and to automatically report when battery pod and battery container powers level is nearly depleted, and also the site controller automatically schedules a time to delivery a fully charged battery container and reports this action to headquarters,

a communication method that is to sent data and receive data to automatically to an on site automated merchant vending machine,

a communication method that is to sent data and receive data automatically to an on site hybrid energy system controller which manages multiple power production systems on site and automatically shuts down power production at the site to prevent overload damage to factory devices,

a communication method that is to send data and receive on and off site and thus information is evaluated and thus said control system is to automatically transmit extra power to on shore electrical grid receiver via an on and off shore transmission cable network.

* * * * *